

G U I D E - S P E C WeatherBond PRO TPO Fleece Adhered Roofing System using Bead Applied DASH/FAST Adhesive

July 2015

This **GUIDE-SPEC** is a brief outline of WeatherBond's WeatherBond PRO TPO Fleece Adhered Roofing System with Bead Applied DASH/FAST Adhesive and is intended for use as a submittal with a bid package. Specifiers and the WeatherBond Contractor must comply with the applicable Sections of WeatherBond's Installation Guide, prior to design or bid.

PART I GENERAL

1.01 DESCRIPTION

This WeatherBond PRO TPO Fleece Adhered Roofing System incorporates WeatherBond PRO TPO (white, gray or tan) reinforced TPO membrane laminated to non-woven polyester fleece-backing. The membrane is fully adhered to an acceptable insulation or substrate with DASH/FAST Adhesive applied in beads.

Adjoining sheets of WeatherBond PRO TPO Fleece membrane are joined together with a minimum 1-1/2" wide hot air weld.

1.02 QUALITY ASSURANCE

A. This roofing system should be installed by a WeatherBond Contractor in compliance with drawings and specifications as approved by WeatherBond.

1.03 SUBMITTALS

- A. To ensure compliance with WeatherBond's requirements, the following projects should be forwarded to WeatherBond for review prior to installation, preferably prior to bid.
 - 1. Air pressurized buildings, canopies, and buildings with large openings, cold storage buildings or freezer facilities, adhered roofing system projects over 100' in height or projects where the membrane is expected to come in direct contact with petroleum-based products, waste products (i.e., grease, oil, animal fats, etc) and other chemicals.

1.04 GENERAL DESIGN CONSIDERATIONS

- A. It is the responsibility of the building owner or his/her designated representative to verify structural load limitation. In addition, a core cut may be taken to verify weight of existing components when the roofing system is to be specified on an existing facility.
- B. On new construction projects, especially in cold climate regions, moisture generated due to the construction process could adversely impact various components within the roofing assembly if not addressed. Refer to Spec Supplement G-01-11 "Construction Generated Moisture" included in the WeatherBond Technical Manual.
- C. On structural concrete decks, when a vapor retarder is not used, gaps in the deck along the perimeter and around penetrations must be sealed along with vertical joints between tilt-up panels, if present, to prevent infiltration of hot humid air and possible moisture contamination resulting from condensation. This is specifically important when adhesive is used to attach the roof insulation.

CAUTION: If left unaddressed, collected moisture could weaken insulation boards and facers resulting in a blow-off or increase the probability of mold growth.

- D. Vapor Retarders
 - 1. WeatherBond does not require a vapor retarder for the protection of the membrane; however, it should be considered by the specifier for the protection of the roofing assembly (i.e. primarily insulation, underlayment and adhesives). The following criteria should be considered by the specifier:

1

- a. Use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly, should be investigated by the specifier.
- b. In the generally temperate climate of the United States, during the winter months, water vapor flows upward from a heated, more humid interior toward a colder, drier exterior. Vapor retarders are more commonly required in northern climates than in southern regions, where downward vapor pressure may be expected and the roofing membrane itself becomes the vapor retarder.

1.05 WARRANTY

- A. A 15 or 20-Year Membrane Material Warranty for commercial buildings is available at no charge.
- B. A 15-year or Limited Lifetime Material Warranty is available for residential applications at no charge
- C. A 10 or 15-year Extended warranty is available for residential or commercial applications for a charge

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the original, unopened containers labeled with the manufacturer's name, brand name and installation instructions.
- B. Job site storage temperatures in excess of 90°F may affect shelf life of curable materials (i.e., DASH/FAST Adhesive Parts A & B, splicing cement, sealants, cleaners, primers, Pourable Sealer, Peel & Stick Flashing and uncured flashing).
- C. When liquid adhesives and sealants are exposed to lower temperatures, restore to a minimum of 60°F before use. Do not store containers with opened lids due to loss of solvent which will occur from flash off.
- D. WeatherBond PRO TPO Fleece Membrane should be stored in its original plastic wrap and be covered to protect from moisture. Any moisture absorbed by the fleece-backing must be removed by using a wet-vac system, prior to membrane adhesion.

PART II PRODUCTS

2.01 GENERAL

The components of this roofing system are to be products of WeatherBond or accepted by WeatherBond as compatible. The installation, performance or integrity of products by others, **when selected by the specifier and accepted as compatible by WeatherBond**, is not the responsibility of WeatherBond and is expressly disclaimed by the WeatherBond Warranty.

2.02 MEMBRANE

WeatherBond PRO TPO Fleece 100, 115, 135 and 145 Membrane incorporates WeatherBond PRO TPO (white, gray or tan) reinforced TPO membrane laminated to a 55-mil thick non-woven polyester fleece-backing resulting in a total finished sheet thickness of 100, 115, 135 or 145 mils.

For available membrane widths and lengths refer to applicable WeatherBond PRO TPO Fleece Specification or Product Data Sheets.

2.03 RELATED MATERIALS

A. DASH/FAST Adhesive, Cleaners, Splicing Cement, Sealants, Primers, Flashing, Peel & Stick Flashing, Termination Bars, WeatherBond Insulation, Insulation Fasteners and Water Cut-Off Mastic are required for use with this roofing system. Other WeatherBond products, such as insulation and edgings are also suggested.

Other Products: Walkway Pads, Pre-Molded Pipe Flashings, Corners and Pourable/Molded Sealer Pockets.

PART III EXECUTION

3.01 GENERAL

A. When feasible, begin the application at the highest point of the highest roof level and work to the lowest point to prevent moisture infiltration and minimize construction traffic on completed sections. This will include completion of all flashings and terminations.

3.02 ROOF DECK CRITERIA

- A. A proper substrate shall be provided by the building owner. The structure shall be sufficient to withstand normal construction loads and live loads.
- B. Defects in the roof deck must be reported and documented to the specifier, general contractor and building owner for assessment. The WeatherBond Contractor shall not proceed unless the defects are corrected.
- C. When mechanically attaching the insulation with WeatherBond Fasteners and Insulation Plates, refer to WeatherBond PRO TPO Fleece Specification for acceptable decks and the applicable WeatherBond Fasteners.

3.03 SUBSTRATE REQUIREMENTS

- A. The membrane may be adhered with DASH/FAST Adhesive directly over structural concrete, wood decks (new or tear-off). An existing smooth surfaced asphalt built-up roof (Type III or IV Asphalt), modified bitumen, or mineral surfaced cap sheet are also acceptable substrates. Direct application over certain types of cellular or perlite lightweight insulating concrete substrate may also be specified (contact WeatherBond for acceptable lightweight insulating concretes).
- B. Acceptable WeatherBond insulations include all types currently approved with Design "A" Adhered Roofing Systems.
- C. The substrate must be dry, relatively smooth, free of protrusions, debris, sharp edges or foreign materials and must be free of accumulated water, ice and snow. Cracks or voids in the substrate greater than 1/4" (6 mm) must be filled with a suitable material.
- D. On retrofit-recover projects, cut and remove wet insulation as identified by the specifier and fill all voids with new insulation, so that it is relatively flush, prior to installing an approved insulation.

3.04 INSTALLATION

Refer to the applicable Safety Data Sheets and Product Data Sheets for cautions and warnings.

A. Insulation Attachment

- 1. WeatherBond DASH/FAST Adhesive may be specified for insulation securement in full spray or beads with spacing as outlined in the WeatherBond installation instructions.
- 2. WeatherBond Fasteners may be used, when specified, to secure WeatherBond Insulation at the specified density outlined in the WeatherBond installation instructions

B. Membrane Adhesion

- 1. WeatherBond PRO TPO Fleece Membrane shall be adhered to an acceptable substrate with a two component, bead applied, low-rise adhesive supplied by WeatherBond. DASH/FAST Adhesive is applied to the substrate only and the membrane is rolled into the wet adhesive once it has foamed up approximately 1/8" and begins to "string" when touched with a Splice Wipe. Roll the membrane with a weighted (100 150 pounds) rubber coated steel roller to set the membrane into the adhesive.
- 2. Adjoining sheets of WeatherBond PRO TPO Fleece Membrane are overlapped a minimum of 3" along length of membrane (at selvage edges) in preparation for splicing. At end laps (along width of sheet), membrane shall be butted together and overlaid with a minimum 6" wide Peel & Stick Cured Cover Strip for EPDM or reinforced membrane for TPO.
- 3. Refer to WeatherBond Technical Manual for alternate attachment methods.

4. Membrane Splicing of WeatherBond PRO TPO Fleece Systems

Refer to appropriate splicing procedures published in the WeatherBond PRO TPO Fleece Specifications.

D. Flashing

- 1. Flashing of standard penetrations and edge conditions shall conform to the details in WeatherBond's WeatherBond PRO TPO Roofing System installation instructions as applicable.
- 2. Details not depicted in these publications shall be submitted to WeatherBond for review prior to installation.
- 3. At angle changes along walls, curbs, skylights, etc., WeatherBond PRO TPO Fleece membrane must be adhered in DASH/FAST Adhesive beads placed directly at the angle change and an additional bead spaced a maximum of 3" away from the first bead (at the angle change).

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